

ANDROMAT TODAY

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HEAT

"Keep cool.... It could mean your life"

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Greetings,

Summer is in full swing. With record breaking heat, global warming seems to be in full force. That is until the next crippling ice event.....

It's hot!!!

This quarter, we are doing more of a public service announcement. Andromats aren't the only thing that requires maintenance, our bodies do too. With the high temperatures of late, heat related injuries are on the rise. On average, 660 people every year in the US lose their lives as a result of heat stress.

Our bodies are great machines. They provide us with a wide range of operation with limits and will tell us when we exceed those limits.

Working in the heat is one of these operational envelopes. Most of us have the need to work, and doing so when it gets hot is no exception. Our bodies

continued on page 2

INSIDE THIS ISSUE

- 1 Heat
- 1 It's Hot
- 2 Heat Cramps
- 2 Heat Exhaustion
- 2 Heat Stroke
- 2 Conclusion

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Labor Day 7-SEP-15

Labor Day



Andromat Today is a quarterly trade publication for discussing Andromat issues important to the end user. Each issue will contain useful tidbits of information as well as any news updates from the company. Look for your issue of *Andromat Today* in your inbox.

Not getting your issue? Submit your email address to service@andromatusa.com and we'll ensure you are added to the list.

Do you have a topic for *Andromat Today*? Send us what you would like to see and your name could appear in an upcoming issue. Send your requests to service@andromatusa.com.

can adapt to this environment by sweating and will go as far as to shut down should we get too hot. Heat stress is broken down into three categories; heat cramps, heat exhaustion, heat stroke.

Heat Cramps:

This condition is much as it sounds. As we sweat, we begin to lose vital nutrients in the support of working muscles. If we fail to replace these minerals, our muscles may begin to cramp, usually in the abdomen, arms, or legs. Replacing the lost minerals (sports drinks), along with rest, will alleviate these symptoms. Contact 911 or safety personnel if conditions do not improve. Keep in mind that heat cramps don't occur with all people and may be a sign of heat exhaustion.

Heat Exhaustion:

Heat exhaustion is the body's response to excessive loss of water and minerals. A few of the symptoms are: profuse sweating, extreme fatigue, dizziness, confusion, cramps, nausea, fast and shallow breathing. To alleviate these symptoms, move to shaded or air conditioned area. Consume plenty of water and/or sports drinks. If necessary, fan the individual or soak clothing with cool water. Contact 911 or safety personnel if conditions do not improve.

Heat Stroke:

Heat stroke is the most severe form of heat related stress. Heat stroke can lead to brain damage and death if left untreated. In addition to the previous symptoms listed, sufferers of heat stroke may also have severe headache, hot red skin, lack of sweat, fainting, or seizures. If you someone experiencing some or all of these symptoms, don't hesitate, call 911 or your nearest safety person. Immediately take the person to a shady or air conditioned area. Loosen or remove outer clothing. Apply cold packs or ice to the individual's armpits and groin. Fan the person and/or wet the body or clothing with cool water. If the individual is responsive, begin giving water as soon as possible. Stay with the person until help arrives.

Conclusion:

No two people are alike. Each of us reacts differently to working in the heat. Working in locations such as foundries and forges present a greater risk of heat stress due to the environment. Be aware. Know yourself and your limits. Be mindful of others around you. Be prepared, for the life you save could be your own.

If you would like further information on heat stress and the related illnesses, please contact:

https://www.osha.gov/SLTC/heatstress/heat_illnesses.html

Foundry specific data can be found:

http://www.afsinc.org/files/establishing%20heat%20stress%20update_rev.pdf

HEAT STRESS

USE BEST PRACTICES

- WATER**
 - Drink water frequently. Drink enough water that you never become thirsty.
 - Add salt to water and keep ice water in a place that is easily accessible while you work.
 - Avoid drinks with caffeine, alcohol, and large amounts of sugar as these drinks dehydrate you more.
- SHADE**
 - Take breaks in the shade or a cool area when possible.
 - Take more breaks in extreme heat and humidity.
 - Consider using non-toxic portable sources of shade, such as umbrellas or canopies.
- CLOTHING**
 - Wear light-colored, loose-fitting, breathable clothing such as cotton.
 - Use a wide-brimmed hat and sunglasses. Wear earplugs to protect your ears.
 - Avoid non-breathable synthetic clothing. Use caution while wearing protective clothing or equipment.
- ACCLIMATION**
 - Monitor your own physical condition.
 - Be aware of the physical condition of your coworkers.
 - Use the "buddy system" to keep track of workers and supervisors when out in the field.
- HEAT CHANGING**
 - Gradually build up to heavy work.
 - Schedule heavy work during the coolest parts of the day.
 - Alternate tasks when possible.

THE HEAT EQUATION

Relative Humidity vs. Temperature

70% Humidity: 100°F / 37.8°C
60% Humidity: 95°F / 35°C
50% Humidity: 90°F / 32.2°C
40% Humidity: 85°F / 29.4°C
30% Humidity: 80°F / 26.7°C

HIGH TEMPERATURE + HIGH HUMIDITY + PHYSICAL WORK = HEAT ILLNESS

When the body is unable to cool itself through sweating, serious heat stress may occur. The most severe heat-induced illnesses are heat exhaustion and heat stroke. If actions are not taken to treat heat exhaustion, the stress could progress to heat stroke and possible death.

Legend:
■ Danger
■ Caution
■ Less Hazardous

TYPES OF HEAT STRESS

HEAT STROKE

Heat stroke is the most serious heat-related disorder. It occurs when the body becomes unable to control its temperature. The body's temperature rises rapidly, the sweating mechanism fails, and the body is unable to cool down. When heat stroke occurs, the body temperature can rise by 100 degrees Fahrenheit or higher within 10 to 15 minutes. Heat stroke can cause death or permanent disability if emergency treatment is not given.

Symptoms:

- High body temperature
- Hot, dry skin (no sweating)
- Confusion/dizziness
- Chills
- Headache
- Throbbing headache

First Aid:

- Tell the person who has a radiophone and can call the supervisor – you need medical help.
- Start providing first aid while you wait for the ambulance to arrive.
- Move the person to cool off in the shade.
- Little by little, give him water (as long as he is not vomiting).
- Loosen the clothing.
- Help cool him: fan him, put ice packs in groin and underarms, or soak his clothing with cool water.

HEAT EXHAUSTION

Heat exhaustion is the body's response to an excessive loss of the water and salt, usually through excessive sweating. Workers most prone to heat exhaustion are those that are elderly, have high blood pressure, and those working in hot environments.

Symptoms:

- Fatigue
- Extreme weakness or fatigue
- Dizziness, confusion
- Nausea
- Cramping, mild aches
- Pain or flushed complexion
- Rapid heartbeat
- Slightly elevated body temperature
- Fast and shallow breathing

First Aid:

- Tell the person who has a radiophone and can call the supervisor – you need medical help.
- Start providing first aid while you wait for the ambulance to arrive.
- Move the person to cool off in the shade.
- Little by little, give him water (as long as he is not vomiting).
- Loosen the clothing.
- Help cool him: fan him, put ice packs in groin and underarms, or soak his clothing with cool water.

HEAT CRAMPS

Heat cramps usually affect workers who sweat a lot during strenuous activity. This sweating depletes the body's salt and moisture levels. Low salt levels in muscles cause painful cramps. Heat cramps may also be a sign of heat exhaustion.

Symptoms:

- Muscle pain or spasms, usually in the abdomen, arms, or legs.

First Aid:

- Stop all activity and sit in a cool place.
- Drink clear juice or a sports beverage.
- Do not return to strenuous work for a few hours after the cramps subside because further exertion may lead to heat exhaustion or heat stroke.
- Drink medical attention if any of the following apply:
 - The worker has heat problems.
 - The worker is on a heat-related job.
 - The cramps do not subside within one hour.

HEAT SYNCOPE

Heat syncope is a fainting (syncope) episode or dizziness that usually occurs with prolonged standing or sudden rising from a sitting or lying position. Factors that may contribute to heat syncope include dehydration and lack of acclimatization.

Symptoms:

- Lightheadedness
- Fainting

First Aid:

- Workers with heat syncope should:
 - Sit or lie down in a cool place when they begin to feel symptoms.
 - Slowly drink water, clear juice, or a sports beverage.

USING YOUR HEAT STRESS RESPONDER KIT IN AN EMERGENCY

STEP 1: Functional Thermometer
 Hold the Forehead Thermometer firmly against the actor's forehead for 15 seconds to get an accurate reading.

STEP 2: Cool Packs
 Place Cool Packs on a flat surface and stick with Velcro to capture inner lining of liquid. Stick to the victim.
 Tape Cool Packs under both armpits and 2 packs in the groin area.

STEP 3: Rescue Blanket
 Unroll the Rescue Blanket to full length, shape closely around victim to keep them cool.

To Order Any Additional Required Postings Or For More Information, Please Call... 1-888-306-7377 **OSHA4LESS.COM**